

## ABSTRACT OF THE DISCLOSURE

The invention concerns a multibeam antenna comprising: a photonic bandgap material (20) having at least one band gap; at least one periodicity defect so as to produce at least one narrow bandwidth inside said at least one band gap of said photonic bandgap material, and excitation elements (50 to 43) for enabling electromagnetic waves to be received inside said at least one narrow bandwidth. The excitation elements are mutually arranged so as to generate radiating spots (46 to 49) partly overlapping on one surface of the photonic bandgap material.